

GRASSED WATERWAY OR OUTLET

Design Survey

The following information shall be obtained and recorded in the field notes:

- a. Profile and cross-sections along centerline.
- b. Topography of outlet (if required).

Design Data

The following will be considered minimum in the design of grassed waterways or outlets. The following will be recorded in the field notes or in the design notes.

- a. Hydrology computations.
- b. Hydraulic computations - consider need for methods for discharging low prolonged flows.
- c. Outlet design (structural - vegetated etc.).
- d. Vegetation requirements.
- e. Seed bed preparations.
- f. Seeding requirements.

Drawings and Specifications

The complexity of the waterway or outlet will dictate whether drawings are required. If drawings are required to inform the owner of construction requirements, they shall include, but will not be limited to the following:

- a. Plan view of waterway and outlet.
- b. Cross-section of installation.
- c. Details of outlet including structural layout.
- d. Table of quantities.
- e. Location map.

Practice specifications and, if needed, applicable "Items of Work and Construction Details" will be provided for each item or phase of construction. The specifications may be included on the drawings.

Layout Survey Notes

The following information shall be recorded in the field notes. On most waterways, this phase may be combined with the design survey.

- a. Centerline and slope stakes.
- b. Grade and alignment stakes for outlet.

Compliance Checks

The complexity of the structure will dictate the need for compliance checks during construction. All compliance checks shall be recorded in the field notes. Narratives of construction checks shall be recorded in the Job Diary or on a sheet in the field notes. Compliance checks shall include, but will not be limited to the following:

- a. Profile and cross-sections of waterway.
- b. Alignment, measurements and elevations of outlet structure.
- c. Establishment of vegetation.
- d. Statement of compliance.

As-Built Plans

If plans are required, the as-built plans shall reflect significant changes in linear measurements, quantities, alignment or design changes. If there where no changes, the drawings shall be marked "As Built".